

**DOCKET NO.: IBIS0002-100 (DIBIS-0003US)****PATENT****In the Claims:**

The current status of all claims is listed below and supercedes all previous lists of claims.

Please amend claims 51, 52, 55, and 58 as indicated below.

1-50 (Cancelled).

51. (Currently amended) A service for providing characterizing information about a bioagent, comprising the steps of:

a) providing a database of base composition signatures indexed to molecular masses of amplification products of known bioagents;

b) interrogating the database with an identification query comprising a measured molecular mass of a bioagent, wherein the measured molecular mass is of an amplification product a primer pair generated amplification product comprising a variable region that is present within a gene involved in translation, replication, recombination, repair, transcription, nucleotide metabolism, amino acid metabolism, lipid metabolism, energy generation, uptake, or secretion, and wherein the variable region is flanked by a pair of highly conserved regions to which the primer pair hybridizes; and

c) delivering a response generated by the database, wherein the response provides characterizing information for the bioagent.

52. (Currently amended) A service of claim 51 wherein the gene is DNA polymerase III beta, elongation factor TU, heat shock protein groEL groEL, RNA polymerase beta, phosphoglycerate kinase, DADH NADH dehydrogenase, DNA ligase, DNA topoisomerase, elongation factor G, or RNase P.

53. (Previously presented) A service of claim 51 wherein the gene is DNA polymerase III beta.

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54. (Previously presented) A service of claim 51 wherein the gene is elongation factor TU.
55. (Currently amended) A service of claim 51 wherein the gene is heat shock protein groEL groEL.
56. (Previously presented) A service of claim 51 wherein the gene is RNA polymerase beta.
57. (Previously presented) A service of claim 51 wherein the gene is phosphoglycerate kinase.
58. (Currently amended) A service of claim 51 wherein the gene is DADH NADH dehydrogenase.
59. (Previously presented) A service of claim 51 wherein the gene is DNA ligase.
60. (Previously presented) A service of claim 51 wherein the gene is DNA topoisomerase.
61. (Previously presented) A service of claim 51 wherein the gene is elongation factor G.
62. (Previously presented) A service of claim 51 wherein the gene is RNase P.
63. (Previously presented) A service of claim 51 wherein the response is delivered via a network.
64. (Previously presented) A service of claim 63 wherein the network is a local area network, a wide area network, or the internet.
65. (Previously presented) A service of claim 51 wherein the characterizing information comprises a genus name, a species name, or a strain name.

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66. (Previously presented) A service of claim 51 wherein the variable region exhibits no greater than about 5% identity among species.

67. (Previously presented) A service of claim 51 wherein the variable region is between about 50-250 nucleotides.

68. (Previously presented) A service of claim 51 wherein the highly conserved regions exhibit about 95% identity among species.